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Gasteracantha cancriformis (L.), a Spectacular Spider New to the Fauna of Virginia (Araneae: Araneidae)

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Knowledge of the spider fauna of Virginia has increased significantly in recent years, primarily as a result of pitfall surveys conducted by the Virginia Museum of Natural History and the Division of Natural Heritage (DNH), Virginia Department of Conservation and Recreation. These surveys have resulted in numerous new state records of terrestrial species (Hoffman, 1992; Hoffman, unpublished). However, pitfall trapping rarely results in captures of orb-weaving spiders (Araneidae).

Gasteracantha cancriformis (Linnaeus) is one of the most spectacular spiders in North America. Females of this orb-weaving species are easily recognized by their wide, sclerotized abdomens, which are adorned with six prominent spines, as illustrated in Levi (1978) and several popular works (e.g., Levi & Levi, 1990; Milne & Milne, 1980). Males are much smaller than females and lack abdominal spines (Levi, 1978). The previously reported range of *G. cancriformis* within the United States extended from North Carolina south to Florida and west to California (Kaston, 1978; Levi, 1978). This species also inhabits the West Indies and ranges south from Mexico to northern Argentina (Levi, 1978).

During the course of faunal surveys conducted by DNH staff in southeastern Virginia during the past several years, records of *G. cancriformis* were obtained at the following three sites (from south to north): City of Virginia Beach: False Cape State Park, one female, 3 July 1991, K. A. Buhlmann. Surry Co.: Swanns Point, Colonial National Historical Park, 3 km NNW of Scotland, one female, 5 October 1993, S. M. Roble. Northampton Co.: Greens Creek at County Route 600, 3 km NE Nassawadox, five females, 3 December 1993, S. M. Roble. These records extend the known range of *G. cancriformis* approximately 280 km N of the nearest North Carolina locality plotted in Levi (1978).

No data are available on the abundance of G. *cancriformis* at False Cape State Park. However, it is common at both of the other sites. Adult females were found in webs 1.5-2.5 m above ground level on trees and

shrubs. Adult males were not actively sought at any of the three sites. The Swanns Point site is across the James River from Jamestown Island (James City County). A brief survey of the island on the same date failed to reveal the presence of *G. cancriformis*. The Greens Creek site is nearly 50 km N of the tip of the Delmarva Peninsula and also within 5 km of the Accomack County line. Due to the absence of any obvious biogeographic barrier in this area, it is likely that *G. cancriformis* ranges further north on the Eastern Shore of Virginia toward Maryland.

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Literature Cited

Hoffman, R. L. 1992. Purse-web spiders (Atypidae) in Virginia (Araneida: Mygalomorphae). Banisteria 1: 5-7.

Kaston, B. J. 1978. How to Know the Spiders. Third edition. Wm. C. Brown Company Publishers, Dubuque, Iowa. 272 pp.

Levi, H. W. 1978. The American orb-weaver genera Colphepeira, Micrathena and Gasteracantha north of Mexico (Araneae, Araneidae). Bulletin of the Museum of Comparative Zoology 148(9): 417-442.

Levi, H. W., & L. R. Levi. 1990. A Guide to Spiders and Their Kin. Golden Press, New York. 160 pp.

Milne, L., & M. Milne. 1980. The Audubon Society Field Guide to North American Insects and Spiders. Alfred A. Knopf, New York. 989 pp.